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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,621	03/01/2002	David Pratt Remsen	58378.127	7946
23483	7590	07/01/2004	<div>EXAMINER</div> <div>CHEN, CHONGSHAN</div>	
WILMER CUTLER PICKERING HALE AND DORR LLP 60 STATE STREET BOSTON, MA 02109			<div>ART UNIT</div> <div>2172</div>	<div>PAPER NUMBER</div>
DATE MAILED: 07/01/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/087,621	Applicant(s) REMSEN ET AL.	
	Examiner Chongshan Chen	Art Unit 2172	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

1. Claims 1-39 are pending in this Office Action.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-31 and 33-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cotter et al. ("Cotter", "The National Biological Information Infrastructure: coming of age", Online Information Review v24n6 PP: 429-438 2000 ISSN: 1468-4527) in view of Talib et al. ("Talib", Pub. No.: US 2001/0047353).

As per claim 1, Cotter teaches a method for use in managing taxonomic information, comprising:

identifying a first name that specifies an organism (Cotter, page 2-4);

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based on the first name and a database of organism names, determining a second name that specifies the organism, the second name representing a link between pieces of biological identification information in the database (Cotter, page 2-4).

Cotter does not explicitly disclose based on the second name, identifying information associated with the organism. Talib discloses based on the second name, identifying information associated with the organism (Talib, page 3, [0034]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to search based on the second and related name of the organism in the system of Cotter in order to find all the possible search results related to the organism. If just search based on the first name, all other available information identified by the synonyms of the first name will not be located.

As per claim 2, Cotter and Talib teach all the claimed subject matters as discussed in claim 1, and further teach submitting the first name to a portion of the distributed database; and receiving the second name from the portion of the distributed database (Talib, page 3, [0034]).

As per claim 3, Cotter and Talib teach all the claimed subject matters as discussed in claim 1, except for explicitly disclosing allowing a first portion of the database to be administered by a first administrator and a second portion of the database to be administered by a second administrator. However, Talib discloses databases storing taxonomic information. It is well known that a database administrator manages the database.

As per claim 4, Cotter and Talib teach all the claimed subject matters as discussed in claim 1, and further teach determining a classification for the first name; and based on the classification, submitting the first name to a portion of the database (Talib, page 3, [0034]).

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As per claim 5, Cotter and Talib teach all the claimed subject matters as discussed in claim 1, except for explicitly disclosing at least one of the first and second names includes a trinomen. However, both Cotter and Talib teach databases storing taxonomic information and names of the organisms and their synonyms which obvious includes a name for a trinomen, or polynomen, or a modern name of the organism, or non-modern name of the organism, or a scientific name of the organism, or a non-scientific name of the organism.

Claims 6-10 are rejected on grounds corresponding to the reasons given above for claim 5.

As per claim 11, Cotter and Talib teach all the claimed subject matters as discussed in claim 1, and further teach receiving a request for information including the first name; and based on the request, selecting a database access layer to receive the request (Talib, page 3, [0034]).

As per claim 12, Cotter and Talib teach all the claimed subject matters as discussed in claim 1, and further teach receiving a request for information including the first name; and directing the request to an application layer for serving client functions (Talib, page 3, [0034]).

As per claim 13, Cotter and Talib teach all the claimed subject matters as discussed in claim 1, and further teach receiving a request for information including the first name; and directing the request to a data layer to determine a unique identifier associated with the organism (Cotter, page 2-4).

As per claim 14, Cotter and Talib teach all the claimed subject matters as discussed in claim 1, and further teach identifying a textual description associated with the organism (Cotter, page 2-4).

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As per claim 15, Cotter and Talib teach all the claimed subject matters as discussed in claim 1, except for explicitly disclosing identifying an illustration associated with the organism. However, both Cotter and Talib teach database storing information associated with organisms. It would have been obvious to one of ordinary skill in the art at the time the invention was made to associate an illustration with the organism in the database of Talib in order to describe the organism.

As per claim 16, Cotter and Talib teach all the claimed subject matters as discussed in claim 1, except for explicitly disclosing identifying a multimedia data object associated with the organism. However, both Cotter and Talib teach database storing information associated with organisms. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to associate a multimedia object such as picture with the organism in the database of Talib in order to show what the organism looks like.

As per claim 17, Cotter and Talib teach all the claimed subject matters as discussed in claim 1, and further teach identifying a data pointer associated with the organism (Talib, page 3, [0034]).

As per claim 18, Cotter and Talib teach all the claimed subject matters as discussed in claim 1, and further teach basing the identification of the information on a defined domain of information (Talib, page 3, [0034]).

As per claim 19, Cotter teaches a method for use in managing taxonomic information, comprising:

identifying a name that specifies an organism (Cotter, page 2-4);

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based on the name and a database of organism classifications, determining a classification for the organism (Cotter, page 2-4).

Cotter does not explicitly disclose based on the classification, identifying information associated with the organism. Talib discloses based on the classification, identifying information associated with the organism (Talib, page 3, [0034]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to search based on the classification associated with the organism in the system of Cotter in order to find all the possible search results related to the organism. Because search just by name might miss some important information associated with the organism. Search based on the classification of the organism will broad the search scope and retrieve all the important information associated with the classification of the organism.

As per claim 20, Cotter and Talib teach all the claimed subject matters as discussed in claim 19, and further teach determining a biological classification for the organism (Cotter, page 2-4).

As per claim 21, Cotter and Talib teach all the claimed subject matters as discussed in claim 19, and further teach determining a geographical classification for the organism (Cotter, page 2-4).

As per claim 22, Cotter and Talib teach all the claimed subject matters as discussed in claim 19, and further teach determining a non-biological classification for the organism (Cotter, page 2-4).

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As per claim 23, Cotter and Talib teach all the claimed subject matters as discussed in claim 19, and further teach identifying information associated with another organism that belongs to the classification (Cotter, page 2-4).

Claims 24 and 26 are rejected on grounds corresponding to the reasons given above for claim 1.

Claims 25 and 27 are rejected on grounds corresponding to the reasons given above for claim 19.

As per claim 28, Cotter teaches a method for use in managing taxonomic information, comprising:

identifying a first name that specifies an organism (Cotter, page 2-4);

based on the first name and a database of organism names, determining a second name that specifies the organism (Cotter, page 2-4);

Cotter does not explicitly disclose deriving, from the second name and original search parameters based on the first name, revised search parameters. Talib discloses deriving, from the second name and original search parameters based on the first name, revised search parameters (Talib, page 3, [0034]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to revise and broaden the search parameters in the system of Cotter in order to find all the possible search results related to the organism. If just search based on the first name, all other available information identified by the synonyms of the first name will not be located.

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As per claim 29, Cotter and Talib teach all the claimed subject matters as discussed in claim 28, and further teach the revised search parameters correspond to a different search scope than the original search parameters (Talib, page 3, [0034]).

As per claim 30, Cotter teaches a method for use in managing taxonomic information, comprising:

identifying a name that specifies an organism (Cotter, page 2-4);

based on the name and a database of organism classifications, determining a classification for the organism (Cotter, page 2-4).

Cotter does not explicitly disclose deriving, from the classification and original search parameters based on the name, revised search parameters. Talib discloses deriving, from the classification and original search parameters based on the name, revised search parameters (Talib, page 3, [0034]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to derive and broaden the search parameters in the system of Talib in order to find all the possible search results related to the organism. Because search just by name might miss some important information associated with the organism. Search based on the classification of the organism will broaden the search scope and retrieve all the important information associated with the classification of the organism.

As per claim 31, Cotter and Talib teach all the claimed subject matters as discussed in claim 30, and further teach the revised search parameters correspond to a different search scope than the original search parameters (Talib, page 3, [0034]).

As per claim 33, Cotter teaches all the claimed subject matters as discussed in claim 32, except for explicitly disclosing deriving, based on the second name and original search

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parameters based on the first name, revised search parameters. Talib discloses deriving, based on the second name and original search parameters based on the first name, revised search parameters (Talib, page 3, [0034]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to revise and broaden the search parameters in the system of Cotter in order to find all the possible search results related to the organism. If just search based on the first name, all other available information identified by the synonyms of the first name will not be located.

Claims 34 and 35 are rejected on grounds corresponding to the reasons given above for claim 28.

Claims 36 and 37 are rejected on grounds corresponding to the reasons given above for claim 30.

5. Claims 32 and 38-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cotter et al. ("Cotter", "The National Biological Information Infrastructure: coming of age", Online Information Review v24n6 PP: 429-438 2000 ISSN: 1468-4527).

As per claim 32, Cotter teaches a method for use in managing taxonomic information, comprising:

identifying a first name that specifies an organism (Cotter, page 2-4); and

determining that the name is sufficiently similar to a text string of a name entry in a names table (Cotter, page 2-4).

Cotter does not explicitly disclose identifying a first taxonomic identifier of the name entry; determining that the first taxonomic identifier is included in a classification entry in a classification table; identifying a second taxonomic identifier of the classification entry; and

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based on the second taxonomic identifier, identifying a second name. However, the system of Cotter determines the synonyms of the organism (Cotter, page 2-4), which obviously includes the steps of disclose identifying a first taxonomic identifier of the name entry; determining that the first taxonomic identifier is included in a classification entry in a classification table; identifying a second taxonomic identifier of the classification entry; and based on the second taxonomic identifier, identifying a second name.

Claims 38 and 39 are rejected on grounds corresponding to the reasons given above for claim 32.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Pidgeon et al. (Pub. No.: US 2003/0100475) disclose predicting taxonomic classification of drug targets.

Hammond (Pub. No.: US 2003/0088547) disclose method and apparatus for providing comprehensive search results in response to user queries entered over a computer network.

Minch et al. (Pub. No.: US 2004/0049510) disclose method of operating a plurality of electronic databases.

Dietzman (5,978,804) discloses natural products information system.

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Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chongshan Chen whose telephone number is 703-305-8319. The examiner can normally be reached on Monday - Friday (8:00 am - 4:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Breene can be reached on (703)305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 25, 2004


SHAHID ALAM
PRIMARY EXAMINER